EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

20-2362 FR
FLAME RETARDANT POLYURETHANE POTTING & ENCAPSULATING COMPOUND UL 94 V-0 Listed

DESCRIPTION:

The 20-2362FR potting and encapsulating compound has been formulated to meet the stringent non-burning requirements of UL 94 V-0. 20-2362FR is listed with Underwriter's Laboratory for passing UL 94 V-0. This system offers a unique combination of properties. 20-2362 is very low in viscosity, flame retardant, has a glass transition temperature of -72°C, and has low moisture permeability. This product forms a soft elastomer that will cushion and protect sensitive electronic components.

FEATURES:	BENEFITS:
Flame Retardant - **UL 94 V-0 listed**	May be used in applications requiring FR
Low Viscosity	Quick self-leveling around components
Low Durometer	Low stress on components & vibration resistance
Low Shrinkage & Exotherm	Will not damage components during cure
Excellent Moisture Resistance	Will not absorb H_2O and can be used in wet environments
Maintains Flexibility at Low Temperatures	Can be used in very cold environments
RoHS and REACH compliant	Finished products are export compliant

TYPICAL PROPERTIES:

Viscosity, cps, 25 °C	
20-2362PFRBK Polyol	7,500
20-2362IFRTB Isocyanate	315
Mixed	2,500
Color	Black
Hardness, Shore A	90
Mix Ratio, By Weight (Polyol:Iso)	100:22
Operating Temperature Range, °C	-40 to +125
Pot Life, 100-gram Mass, 25 °C	20 Minutes
Specific Gravity, 25 °C	
20-2362PFRBK Polyol	1.21
20-2362IFRTB Isocyanate	1.24
Tensile Strength, psi	400
Elongation, %	40

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Dielectric Constant, 1 KHz, 25 °C	4.5
Surface Resistivity, ohm, 25 °C	1×10^{16}
Volume Resistivity, ohm-cm	6×10^{16}
Coefficient of Thermal Expansion, per °C	2.28×10^{-4}
Glass Transition Temperature, °C	-72

INSTRUCTIONS FOR USE:

1. Settling of fillers may occur. Mix polyol before using.
2. By weight, thoroughly mix 100 parts 20-2362PBK to 22 parts 20-2362ITY. Two components should be carefully weighed in metal, plastic, or glass containers. Avoid using paper cups and wooden stirrers.
3. Mixed material can be degassed at 1 to 5 mm Hg to ensure bubble free castings. Containers should be large enough to allow frothing.
4. Cure according to one of the following cure schedules:
    a) 25°C for 24 Hours
    b) 65°C for 2 Hours
    c) 85°C for 1 Hour

Note: When cured at room temperature, full hardness and final properties are achieved in 7-10 days.

STORAGE, HANDLING, & SAFETY:

Store both components at 25 °C. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing. The expected shelf life is 12 months in original unopened containers.

Please read the Safety Data Sheet before using this or any other chemical.

AVAILABILITY:

This product is available in quarts, gallons, five-gallon pails.

IMPORTANT:

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